



Natural Heritage &
Endangered Species
Program

Commonwealth of Massachusetts
Division of Fisheries & Wildlife
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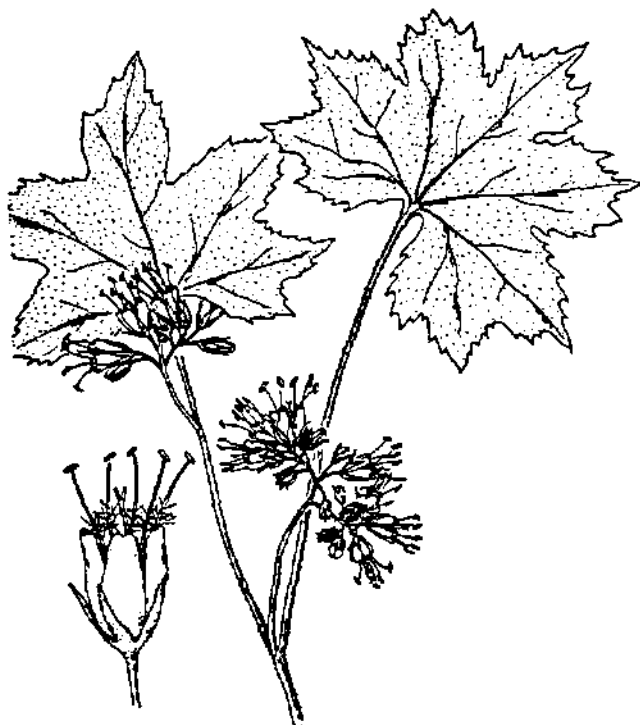
MASSACHUSETTS ENDANGERED PLANTS

BROAD WATERLEAF

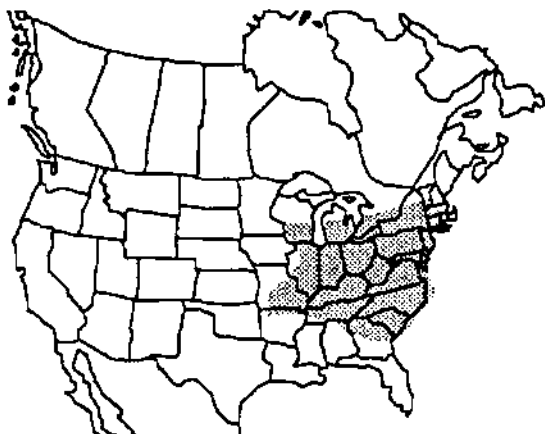
(*Hydrophyllum canadense* L.)

Description

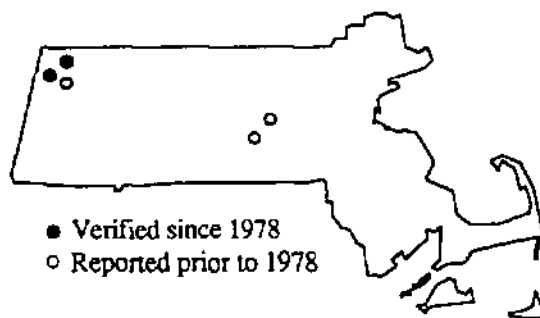
Broad waterleaf is an herbaceous perennial in the Waterleaf family (Hydrophyllaceae) that grows from long, fleshy rhizomes (horizontal, underground stems). Its slender stem grows 3-5 dm (3/4 - 1 3/4 ft.) tall. The genus name *Hydrophyllum* comes from the light green markings on the leaves, which resemble water stains on paper. Broad waterleaf's alternate, palmately lobed, stem-borne leaves are roundish in general out-line, have five to nine lobes, and are unequally toothed. Generally, these leaves are from 1 to 2 dm (3 - 9 in.) wide; because of their resemblance to maple leaves, the plant is also known as the maple-leaved waterleaf. Broad waterleaf's whitish to pinkish-purple, bell-shaped flowers are pentamerous: There are five united petals, five protruding stamens and a calyx (or outer-most floral whorl) of five parts. Each flower is borne on a very short stalk and



Gleason, H.A. The New Britton and Brown Illustrated Flora of the US & Adjacent Canada. NY Botanical Garden. 1952.



Documented Range of
Broad Waterleaf



Massachusetts Distribution by Town

is part of a cluster called a cyme. Flowering season is from mid June through early July.

Range

Broad waterleaf's documented range extends from southern Vermont and western Massachusetts to Maryland, south--in the mountains--to Georgia and Alabama, and west to Wisconsin, Illinois, Missouri and northern Arkansas.

Similar Species

Virginia waterleaf (*Hydrophyllum virginianum*) has flowers similar to those of broad waterleaf. Nevertheless, the leaves of Virginia waterleaf are deeply and pinnately divided, while, in contrast, those of broad waterleaf are rather shallowly, palmately lobed.

Habitat in Massachusetts

In general, broad waterleaf is a plant of rich, moist, limy woods. Broad waterleaf's two current stations in Massachusetts are located on the steep banks of a mountain brook, under a sparse canopy of mesic northern hardwood forest, and at the base of a large marble outcrop, under a canopy of maples and bitternut hickory (*Carya cordiformis*). Associated plant species include various species of shield-ferns (*Dryopteris* spp.), sugar maple (*Acer saccharum*), and other species of maple. The soil at both sites is rich (containing many nutrients, especially calcium).

Population Status

Broad waterleaf is presently listed as "Endangered" in Massachusetts, where there are three historical stations (unverified since 1978) and two current stations (discovered or relocated since 1978). Given the relatively large amount of apparently suitable habitat in the Commonwealth, it is puzzling that more colonies have not been found; however, the plant is generally very rare in New England. Broad waterleaf is also considered rare in New Jersey, South Carolina, and Vermont.